FALKIRK COUNCIL

Subject: ERECTION OF SINGLE WIND TURBINE (29.7 METRES HIGH

TO HUB, 46.7 METRES HIGH TO BLADE TIP) (400 KW) AT OVERTON FARM, DENNY FK6 5JE FOR INTELLIGENT LAND

INVESTMENTS - P/11/0560/FUL

Meeting: PLANNING COMMITTEE

Date: 19 September 2012

Author: DIRECTOR OF DEVELOPMENT SERVICES

Local Members: Ward - Denny and Banknock

Councillor Jim Blackwood Councillor Brian McCabe Councillor John McNally Councillor Martin David Oliver

Councillor Martin David Onve

Community Council: Denny and District

Case Officer: Kevin Brown (Planning Officer), Ext. 4701

1. DESCRIPTION OF PROPOSAL / SITE LOCATION

- 1.1 This detailed application proposed the erection of a single wind turbine measuring approximately 30 metres to hub height and 47 metres to blade tip height with proposed ancillary works consisting of an access road and substation building. The application site is located within a rural location 3km west of Denny. The site lies on the side of a hill which forms part of the Denny Hills Area of Great Landscape Value (AGLV) and is approximately 1km south east of Overton Farm at a ground level of 252 metres above ordnance datum (AOD). The site benefits from the backdrop of hills which rise up to 350 metres AOD approximately 1km to the west of the site.
- 1.2 Access to the site for construction and maintenance is proposed to be taken via a new access track accessing onto Drove Road. The proposed access track follows an existing field boundary and is proposed to remain in place after construction of the turbine. The applicant has advised that they are willing to grass over the access track should it be deemed necessary in order to mitigate the visual impacts of the proposal. The proposed turbine is intended to be connected to the national grid.

1.3 In support of the application the landowner has submitted a statement advising that Overton Farm has been a family owned farm since 1920 and operations at the site currently focus around a herd of beef cattle. The landowner has referred to the large number of agricultural buildings and machinery at the site which need regular maintenance and refers to the expected reduction in Single Farm Payment (SFP), due to come into force in 2013. The landowner has advised that the revenue generated from a wind turbine of this nature would offset the financial gap created by the reduction in SFP and would allow essential maintenance work to be carried out on the farm.

2. REASON FOR COMMITTEE CONSIDERATION

2.1 The application has been called to Committee by Councillor Oliver and Councillor McNally.

3. SITE HISTORY

3.1 None relevant to this application.

4. CONSULTATIONS

- 4.1 The Roads Development Unit have no objection.
- 4.2 The Environmental Protection Unit have no objection, however a condition relating to noise levels has been requested to be attached to any permission given.
- 4.3 The Civil Aviation Authority have no objection.
- 4.4 The Scottish Natural Heritage have no objection.
- 4.5 The Ofcom Spectrum Licensing have no objection.
- 4.6 The RSPB have not responded to consultation.
- 4.7 The Air Ambulance have not responded to consultation.
- 4.8 The Cumbernauld Airport Ltd have raised objections.
- 4.9 The NATS En-Route Ltd have no objection.
- 4.10 The DE Operations North have no objections.
- 4.11 The BAA Safeguarding Team have no objections.

5. COMMUNITY COUNCIL

5.1 The Denny and District Community Council have not commented on this application.

6. PUBLIC REPRESENTATION

- 6.1 In the course of the application 7 contributors submitted letters to the Council (1 objection and 6 letters of support). The salient issues are summarised below:
 - Comments have been received from an adjoining landowner who has received a letter from Intelligent Land Investments advising him that his land is unsuitable for a turbine due to its location within the Denny Hills AGLC. The landowner has pointed out that the current site is also within the same AGLV and is questioning how the current proposal can be acceptable when his was not.

7. DETAILED APPRAISAL

Under section 25 of the Town and Country Planning (Scotland) Act 1997, as amended, the determination of planning applications for local and major developments shall be made in accordance with the Development Plan unless material considerations indicate otherwise.

Accordingly,

7a The Development Plan

Falkirk Council Structure Plan

7a.1 There are no relevant policies within the Falkirk Council Structure Plan

Falkirk Council Local Plan

- 7a.2 Policy EQ19 'Countryside' states:
 - "(1) The Urhan and Village Limits represent the desirable limit to the expansion of settlements for the period of the Local Plan. Land outwith these boundaries is designated as countryside and will be subject to the detailed policies for specific uses indicated in Table 3.3. Development proposals in the countryside for uses not covered by these policies will only be permitted where:
 - it can be demonstrated that they require a countryside location;
 - they constitute appropriate infill development; or
 - they utilise suitable existing buildings.
 - (2) In circumstances where development meets the relevant countryside policy criteria, the scale, siting and design of development will be strictly controlled to ensure that there is no adverse impact on the character of the countryside. In particular:
 - the siting should be unobtrusive, making use of natural features to integrate development into the landform and avoiding skylines;
 - building design should be sympathetic to vernacular building styles and comply with the design principles contained within the Council's 'Design Guide for Buildings in the Rural Areas'; and

- boundary and curtilage treatments should be sympathetic to the rural area, with a preference for stone walling and hedging using native species."
- 7a.3 The application site is located outwith the urban limits and is in an area defined as countryside. Wind turbines by their very nature require to be sited in areas where there is a wind resource. In this regard, a countryside location is considered essential in this instance. The applicant has submitted extensive information in support of the application including a comprehensive Landscape and Visual Assessment. The scale, setting and design of the turbine is considered to have no adverse impact on the character of the countryside. The proposal accords with Policy EQ19.
- 7a.4 Policy EQ23 'Areas Of Great Landscape Value' states:

'The Council will protect Areas of Great Landscape Value from development which would be detrimental to its amenity and distinctive landscape quality. In addition to satisfying other relevant countryside policies, proposals within these areas will only be permitted where accompanied by a landscape and visual assessment demonstrating that the development can be accommodated without adverse impact on the landscape quality."

- 7a.5 The application site is located within the Denny Hills Area of Great Landscape Value (AGLV). The Landscape and Visual Assessment submitted in support of the application take account of this designation and it is considered that the proposal would not be detrimental to the distinctive landscape quality of the Denny Hills AGLV. The proposal accords with Policy EQ23.
- 7a.6 Policy ST20 'Renewable Energy Development' states:

"The Council will support development required for the generation of energy from renewable sources, and the utilisation of renewable energy sources as part of new development, subject to assessment of proposals against other Local Plan policies. Renewable energy development will be viewed as an appropriate use in the countryside where there is an operational requirement for a countryside location."

- 7a.7 The proposed turbine is considered to require a countryside location and as such, renewable energy projects such as this are generally supported by the Falkirk Council Local Plan. The proposal accords with Policy ST20.
- 7a.8 Policy ST21 'Wind Energy' states:

"Wind energy developments will be assessed in relation to the following factors:

- (1) The visual impact of the development, having regard to the scale and number of turbines, existing landscape character, and views from settlements, main transport corridors and other key vantage points. Development will not necessarily be excluded from Green Belts or Areas of Great Landscape Value, but must demonstrate particular sensitivity in terms of scale and design where these designated areas are affected;
- (2) The ecological impact of the development, having regard to Policies EQ24 and EQ25, including impacts on both designated sites and protected species. In particular, developers will be required to demonstrate that there will be no adverse impact on migratory birds;
- (3) The impact on the cultural heritage and the landscape setting of cultural features, having regard to Policies EQ12, EQ14, EQ16, EQ17 and EQ 18;

- (4) The impact on aviation and telecommunications, with particular regard to the safeguarding zones and operational needs associated with Edinburgh, Glasgow and Cumbernauld airports;
- (5) The impact on settlements and residential properties by virtue of noise and 'shadow flicker'; and
- (6) Cumulative impacts in relation to the above factors, where there are existing developments in the area, or the development is one of a number of proposals for an area."
- 7a.9 The applicant has submitted extensive information in support of the application including a comprehensive Landscape and Visual Assessment including assessment of potential cumulative impacts. The information submitted has been assessed and it is considered that the proposal would not be detrimental to visual amenity levels or to the distinctive landscape quality of the Denny Hills AGLV. The applicant has provided supporting information relating to visual, landscape, ecological, cultural heritage, aviation, telecommunication, noise, shadow/flicker and cumulative impacts and it is considered that the impacts in each of these areas are of an acceptable level. The proposal accords with Policy ST21.
- 7a.10 Accordingly, the proposal accords with the Development Plan.

7b Material Considerations

7b.1 The material consideration to be assessed are The National Planning Policies and Guidance, responses to consultation, assessment of public representations and additional planning considerations.

National Planning Policies and Guidance

- 7b.2 CAP 393 (Air Navigation: The Order and the Regulations), CAP 738 (Safeguarding of Aerodromes) and CAP 764 (Policy and Guidance for Wind Turbines) are guidance documents prepared by the Civil Aviation Authority (CAA).
- 7b.3 CAP 393 specifies the minimum height at which aircraft are normally flown. It specifies that an aircraft shall not be flown closer than 500ft to any person, vessel, vehicle or structure.
- 7b.4 CAP 738 describes the regulatory framework for safeguarding aerodromes. It outlines a safeguarding assessment procedure which includes a requirement to calculate if an obstruction infringes the Obstacle Limitation Surface (OLS). If a proposed development does not infringe the OLS and there are no associated issues, a response should be sent to the Planning Authority indicating that there is no safeguarding objection. Associated issues as detailed in the guidance include birdstrike hazard, lighting and impacts on aeronautical systems and radar.

- 7b.5 CAP 764 provides CAA policy and guidance on a range of issues associated with wind turbines and their effect on aviation. The document considers the effects of turbulence caused by the wake of a turbine which extends stream wise behind the blades and the tower. The dissipation of the wake intensity depends on the convection. The turbulence diffusion and the topology (obstacles, terrain etc). It is recognised that aircraft wake vortices can be hazardous to other aircraft, and that wind turbines produce wakes of similar but not identical characteristics to aircraft. The CAA has received anecdotal reports of aircraft encounters with wind turbine wakes representing a wide variety of views as to the significance of the turbulence. However, there are currently no Mandatory Occurrence Reports or aircraft accident reports related to wind turbines in the UK. The CAA is currently investigating the effects of wind turbine wakes on aircraft. Until the result of further research is known, analysis of turbulence can only be undertaken on a case by case basis, taking into account the proximity of the development and the type of aviation activity conducted. Turbulence is of particular concern to those involved in very light sport aviation such as gliding, parachuting, hang-gliding, paragliding or microlight operations.
- 7b.6 The Scottish Government aims to generate 30% of all Scottish energy needs from renewable sources by 2020, including 11% of Scottish heat demand and an equivalent of 100% of Scotland's electricity consumption.
- 7b.7 Scottish Planning Policy states that Planning Authorities should support the development of a diverse range of renewable energy technologies. Hydro-electric and on-shore wind farms are currently the main source of renewable energy supplies but they will increasingly be part of a wider renewables mix. Planning authorities should support the development of wind farms in locations where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. Development Plans should set out the criteria that will be considered in applications for wind farms, which are likely to include visual and landscape impacts, aviation and telecommunications, noise and shadow flicker, and cumulative impacts.
- 7b.8 Planning Circular 2/2003 (Safeguarding of Aerodromes, Technical Sites and Military Explosives Storage Areas) provides details of the system of official safeguarding of aerodromes and technical sites. The circular contains a list of the current officially safeguarded civil aerodromes. Certain civil aerodromes, selected on the basis of their importance to the national air transport system, are officially safeguarded.

Responses to Consultation

7b.9 The Civil Aviation Authority (CAA) have provided standing advice. They remind the Planning Authority of their obligations with regard to consultation and notification in accordance with ODPM/DFT Circular 1/2003 or Scottish Government Circular 2/2003. They encourage consultation with any aerodrome, particularly if it has lodged an unofficial safeguarding map with the Planning Authority.

7b.10 Cumbernauld Airport have objected to the application as they consider the proposed development to represent an unacceptable hazard to aviation on the periphery of the 5km Safeguarding Boundary of Cumbernauld Aerodrome, within the 6NM Wind Vortex radius of Cumbernauld Aerodrome, and on the periphery of the Air-Traffic-Zone Boundary of Cumbernauld Aerodrome and the Circuit Pattern Boundary of Cumbernauld Aerodrome. They refer to CAA policy and guidance document CAP 764 in support of their objection. They indicate that the CAA are in the process of conducting a survey on the effects of wind turbine wakes on light aircraft. Essentially they are promoting a moratorium on medium and large size wind turbines within 6 nautical miles of the aerodrome until the results of the research are known.

Assessment of Public Representations

7b.11 The letter to the adjacent landowner advising of the location of the site within an AGLV was submitted by a private company and does not represent the views of Falkirk Council. Whilst the current application is within the same AGLV as the complainant's proposed site, the current proposal has been submitted as a detailed application whereas no such application was submitted for assessment of the neighbouring site. The current application has been supported by a comprehensive assessment of potential landscape impacts and is deemed to be acceptable. The granting of planning permission on this site in no way prejudices the future assessment of any further applications on neighbouring sites.

Assessment of Cumbernauld Airport Objections

- 7b.12 Following receipt of the Cumbernauld Airport objection the applicants employed the services of DKM Aviation Partners Ltd who have prepared a report in support of the proposals and rebuffing the comments and objections made by Cumbernauld Airport. This report raises questions relating to the accuracy of the claims made by Cumbernauld Airport and clarifies a number of key points as follows:
 - Overton Farm is 5.42 km from Cumbernauld airport. The Cumbernauld objection says it is 5 km.
 - The position is described by Cumbernauld Airport as being on the periphery of the Air Traffic Zone boundary. The Aerodrome Traffic Zone ends at 3.70 km from Cumbernauld airport. Overton Farm is 5.42 km from Cumbernauld airport. The use of the word periphery is therefore misleading and it is considered that the proposed turbine is well outside the Air Traffic Zone boundary.
 - Overton Farm is described by Cumbernauld Airport as being on the periphery of the 5 km Safeguarding boundary of Cumbernauld Aerodrome. Overton is actually 5.42 km from Cumbernauld. The Safeguarding area around each airport is specific to runway length and the type of navigation aids likely to be used. International criteria are then used to calculate the airspace which requires to be safeguarded in each case. This area is called the Obstacle Limitation Surface (OLS). The calculation of impact of any development should use the criteria in the Obstacle Limitation Surface (OLS). Even if structures penetrate the OLS it is still possible to grant planning permission. Cumbernauld Airport make no claim that the Overton Farm turbine will penetrate the OLS. Therefore they have presented no evidence that penetration of the OLS should feature in any planning consideration.

- Reference to a 6NM Wind Vortex Radius of Cumbernauld Aerodrome is also considered to be misleading and is not backed up by Cumbernauld Airport by any definition of what it actually consists of.
- 7b.13 CAA guidance makes no reference to a 6NM Wind Vortex Radius and Cumbernauld Airport have not clarified what they mean by this nor have they mentioned how significant this term may or may not be in their objection. Notwithstanding this, the DKM report goes on to address some of the more specific concerns raised by Cumbernauld Airport in reference to turbulence and the type of aircraft which operate at Cumbernauld Aerodrome. The DKM report refers directly to CAA guidance and raises a number of key issues in this regard which are outlined as follows:
 - Turbulence sinks as soon as it is generated. Therefore the maximum height of any turbulence behind the Overton Farm Turbine would be 150 feet above ground level.
 - Turbulence sinks at about 100 to 200ft per nautical mile and cease on ground impact. Any generated turbulence behind Overton Farm turbine would be continuously descending from 150ft.
 - Decay of turbulence is usually sudden and occurs more quickly in windy conditions. Therefore in windy conditions when a turbine may be expected to produce more turbulence the wind itself will help the vortex to decay more quickly.
 - The Rules of The Air (Air Navigation Order) specifically say that aircraft should not fly closer than 500 feet to structures like the Overton Farm turbine.
 - The proposed turbine would be located to the north of the Airport. The prevailing wind is from the west and south west. In the majority of days any short range turbulence created behind the turbine will be blowing away from Cumbernauld airport.
 - The published flight procedures for Cumbernauld specify a normal joining height of more than 1,000 ft above the safe level for over flying the turbine.
- 7b.14 Fundamentally, the CAA in its CAP 738 Safeguarding of Aerodromes document, paragraph 5.7(g) advises aerodromes that if a proposal is sent to them for consultation but the development falls outside the safeguarded area, it may be appropriate to advise the consulter to seek the comment of the Ministry of Defense (MoD), National Air Traffic Services (NATS) or Directorate of Airspace Policy (DAP). Consultation has been carried out with these bodies and no concerns have been raised. This guidance goes on to state that if the proposed development does not infringe an obstacle limitation surface and there are no associated issues as detailed in 5.7, a response should be sent to the LPA, or developer indicating that there are no safeguarding objections to the proposed development. With this information in mind, and given that the application site is some 5.42km from Cumbernauld Airport, it is considered that the concerns raised by Cumbernauld Airport are significantly less serious than they appear at first glance.

7b.15 Notwithstanding this, the information and assessment provided by the DKM report, comprehensively rebuts the arguments and objections of Cumbernauld Airport in relation to turbulence, its potential impacts on light aircraft and specifically in regard to its impacts on aircraft flying into and out of Cumbernauld Airport. The DKM report has been sent to Cumbernauld Airport for comment however the response received from the airport is not considered to add any weight to their concerns. It is noted that there is current research being carried out into the effect of turbulence from wind turbines on light aircraft, however the site specific assessment carried out by DKM is considered to adequately address this issue for the current application.

Applicant Supporting Statement on Job Creation and Community Contribution

- 7b.16 In support of the application the applicants have submitted a short statement outlining how a development of this nature can impact on job creation. Reference is drawn to the predicted 130,000 jobs expected in the renewable sector by 2020 and to the potential benefits to local employment during the construction and ongoing maintenance of the turbine. It is noted that one potential job creation factor would be as a result of the sustained flow of guaranteed income to the farmer which can then be reinvested on the current farm business.
- 7b.17 The applicants go on to say that whilst Falkirk does not have a Community Contribution Fund for developments of this scale, it is the applicant's company policy to include such a contribution as part of all applications. In this instance, the applicant would provide funding to the Falkirk Homeless Project. Funding would be in the form of a portion of the revenue generated from the turbine. Payments for the charity would be annual, guaranteed and index linked for the lifespan of the turbine which is anticipated to be 20-25 years.

7c Conclusion

- 7c.1 The proposal constitutes an acceptable form of development and accords with the terms of the Development Plan. There are no material planning considerations that warrant a refusal of planning permission in this instance.
- 7c.2 The objection received from Cumbernauld Airport is noted. However, for the reasons outlined in this report, the content of this objection is not agreed with. A decision to grant planning permission despite the objection of Cumbernauld Airport raises no procedural concerns and can be done without notification of the application to the CAA as Cumbernauld Airport is not an officially safeguarded aerodrome (Planning Circular 2/2003). The application is not therefore subject to Scottish Ministers call in procedures.

8. **RECOMMENDATION**

- 8.1 It is therefore recommended that the Planning Committee grant planning permission subject to the following conditions:-
 - (1) The development to which this permission relates must be begun within three years of the date of this permission.

- (2) i. No development shall commence on site unless otherwise agreed with the planning authority until a contaminated land assessment has been submitted and approved. The assessment must determine the nature and extent of any contamination on the site, including contamination that may have originated from elsewhere. Any potential risks to human health, property, the water environment and designated ecological sites should be determined. The contaminated land assessment must be approved in writing by the Planning Authority.
 - ii. Where contamination (as defined by Part IIA of the Environmental Protection Act 1990) is encountered, a detailed remediation strategy should be submitted to the Planning Authority demonstrating that the site will be made suitable for its intended use by removing any unacceptable risks, caused by the contamination. The scheme must be approved in writing by the Planning Authority.
 - iii. Prior to the commencement of development of the site, the remediation works must be carried out in accordance with the terms and conditions of the remediation scheme, and as agreed by the Planning Authority. No part of the development shall be occupied until a remediation completion report/validation certificate endorsed by the relevant parties have been submitted to and agreed in writing by the Planning Authority.
 - iv. If unexpected contamination is found after development has begun, development of the affected part of the site must stop. The developer must notify the Planning Authority immediately and carry out a contaminated land assessment, and undertake any necessary remediation works, before development of the affected part of the site may continue.
- (3) Should substantiated complaints of noise be received as a result of the operation of the wind turbine, the wind turbine operator shall, at its expense, employ an independent consultant approved by the Planning Authority to assess the level of noise emissions from the wind turbine in relation to that specified in the original application at the nearest noise sensitive receptor not financially involved. The report shall be submitted to the Planning Authority for perusal with a view to prevent noise disturbance.
- (4) Notwithstanding the details on the approved plans, the exact colour of the turbine shall be submitted to and approved in writing by the Planning Authority prior to the start of work on site.
- (5) Notwithstanding the details on the approved plans and prior to the start of work on site, exact details of the access track, cable trenching and hardstanding areas shall be submitted to and approved in writing by the Planning Authority. Details shall include an indication of future grass seeding and maintenance of these areas.
- (6) For the avoidance of doubt, micrositing of the turbine is only permissable within the application site boundaries as identified on the approved location plan.

- (7) In the event that the development hereby approved ceases to be used for the purpose for which it was designed, the operator shall inform the planning authority, and the wind turbine and related apparatus, access road and hardstanding shall be removed from the site. Unless otherwise agreed in writing with the Planning Authority, within 2 months of the date on which the use ceases, the site shall be reinstated to a condition agreed with the Planning Authority.
- (8) Prior to the start of work on site, further information shall be submitted to and approved in writing by the planning authority (in consultation with the Ministry of Defense) as to:
 - (i) the date construction starts and will be presumed to end,
 - (ii) the maximum height of construction equipment,
 - (iii) the latitude and longitude of the turbine and,
 - (iv) the form of aviation lighting to be employed.

Reason(s):

- (1) To accord with the provisions of Section 58 of the Town and Country Planning (Scotland) Act 1997.
- (2) To ensure the ground is suitable for the proposed development.
- (3) To ensure that the occupants of adjacent premises are protected against excessive noise intrusion.
- (4-6) To safeguard the visual amenity of the area.
- (7) To ensure the removal of redundant wind turbine installations.
- (8) To enable the Planning Authority to consider these aspects in detail.

Informative(s):

- (1) For the avoidance of doubt, the plan(s) to which this decision refer(s) bear our online reference number(s) 01A, 02A, 03-06 inclusive.
- (2) It is recommended that the applicant should consult with the Development Services Roads Development Unit concerning this proposal in respect of roads impacts during delivery, construction and decommissioning of this development.

Pp
Director of Development Services

Date: 12 September, 2012

LIST OF BACKGROUND PAPERS

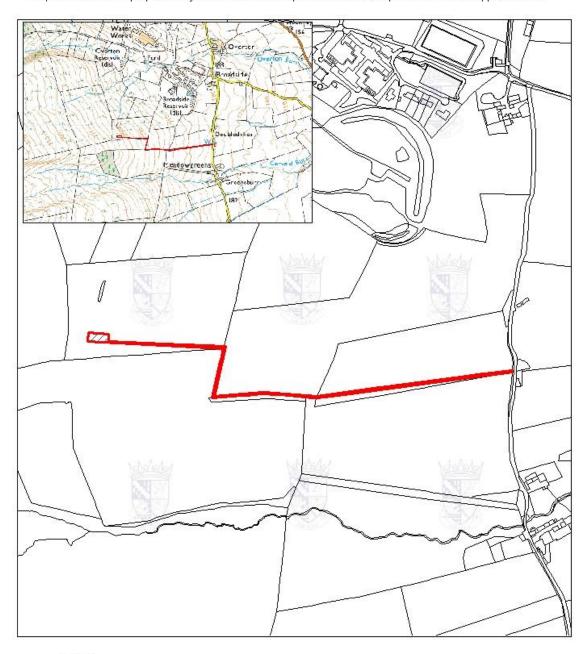
- 1. Falkirk Council Structure Plan
- 2. Falkirk Council Local Plan
- 3. CAP 393 (Air Navigation: The Order and the Regulations).
- 4. CAP 738 (Safeguarding of Aerodromes).
- 5. CAP 764 (Policy and Guidance for Wind Turbines).
- 6. Scottish Government Circular 2/2003.
- 7. Letter of Representation from Mr D Bennie, Greensburn Farm, Denny FK6 5JE on 19 October 2011.
- 8. Letter of Support from Mrs A Mair, North Shields Farm, Denny, FK6 5HJ on 5 September 2012.
- 9. Letter of Support from Owner / Occupier, East Banknock Farm, Denny, FK6 5NA ON 5 September 2012
- 10. Letter of Support from J G Cullen, 5 Broadside Cottage, Denny, FK6 5JE on 5 September 2012.
- 11. Letter of Support from Mr Gary Cullen, Tarduff Hollow, Denny, FK6 5JE on 5 September 2012.
- 12. Letter of Support from Owner / Occupier, Muirfield House, Denny, FK6 5NA on 5 September 2012.
- 13. Letter of Support from Mr John Davie, Harvies Mailing, Denny, FK6 5HH on 5 September 2012.

Any person wishing to inspect the background papers listed above should telephone Falkirk 01324 504701 and ask for Kevin Brown, Planning Officer.

Planning Committee

Planning Application Location Plan P/11/0560/FUL

This plan is for location purposes only. It should not be interpreted as an exact representation of the application site.







Reproduced by permission of Ordnance Survey on behalf of HMSO.

© Crown copyright and database right 2012. All rights reserved.

Ordnance Survey Licence number 100023384